A NEW NUMBER NOMENCLATURE

JOHN CANDELARIA
Loma Linda, California

In two earlier **Word Ways** articles published in August 1975 and February 1976, I proposed a nomenclature for very large numbers, going far beyond the vigintillion (ten to the sixty-third power) commonly regarded as the outer limit. In this article, I introduce some changes to make my proposed nomenclature more consistent with the modern system of Latin cardinal number names, as given on pages 128-9 of Ernest Hettich and A.G.C. Maitland's Latin Fundamentals (New York: Prentice-Hall, 1950). In particular, the number name **millillion**, formerly used to represent the number one followed by 3(1000) + 3 zeros, has now been delayed until 3(1000000) + 3 zeros appear - a much more appropriate location.

As before, the period of a number is defined by the number of zeros following it:

(number of zeros) = 3(period) + 3.

Thus, one million has a period of 1, one billion a period of 2, and so on.

In the table below, number names are presented for selected periods ranging from one to one million; in each case, the period is followed by the number name.

Table 1 Million to Millillion
(periods i = 1, 2, ... 1000000)

1-9 1 million, 2 billion, 3 trillion, 4 quadrillion, 5 quintillion, 6 sextillion, 7 septillion, 8 octillion, 9 nonillion

10-19 10 decillion, 11 undecillion, 12 duodecillion, 13 tredecillion, 14 quattuordecillion, 15 quindecillion, 16 sexdecillion, 17 septendecillion, 18 octodecillion, 19 novemdecillion

20-29 20 vigintillion, 21 viginti-unillion, 22 viginti-duillion, 23 viginti-treillion, 24 viginti-quattroillion, 25 viginti-quinillion, 26 viginti-sextillion, 27 viginti-septeillion, 28 viginti-octoillion, 29 viginti-noveillion

10-90 30 trigintillion, 31 triginti-unillion, .. 40 quadragintillion, 50 quinquagintillion, 60 sexagintillion, 70 septuagintillion, 80 octagintillion, 90 nonagintillion

100-900 100 centillion, 101 centi-unillion, 110 centi-decillion, 120 centi-vigintillion, ..
200 ducentillion, 300 trecentillion, 400 quadringentillion, 500 quingentillion, 600 sexgentillion, 700 septingentillion, 800 octin-

gentillion, 900 nongentillion

1000-9000 1000 decingentillion, 1001 decingenti-unillion, 1010 decingenti-decillion, 1100 decingenti-centillion, 1200 decingenti-ducentillion, ..
2000 bi-decingentillion, 2100 bi-decingenti-uncentillion, 2200 bi-decingenti-ducentillion, ..
3000 tri-decingentillion, 4000 quadri-decingentillion, 5000 quinti-decingentillion, 6000 sexti-decingentillion, 7000 septi-decingentillion, 8000 octi-decingentillion, 9000 noni-decingentillion

10000-90000 10000 deci-decingentillion, 10001 deci-decingenti-unillion, 10010 deci-decingenti-decillion, 10100 deci-decingenti-centillion, 11000 undeci-decingentillion, 12000 duodeci-decingentillion, 13000 tredeci-decingentillion, ..
20000 viginti-decingentillion, 21000 viginti-undecingentillion, 22000 viginti-duodecingentillion, ..
30000 triginti-decingentillion, 40000 quadraginti-decingentillion, 50000 quinquaginti-decingentillion, 60000 sexaginti-decingentillion, 70000 septuaginti-decingentillion, 80000 octaginti-decingentillion, 90000 nonaginti-decingentillion

100000-900000 100000 centi-decingentillion, 110000 centideci-decingentillion, 120000 centiviginti-decingentillion, ..
200000 ducenti-decingentillion, 300000 trecenti-decingentillion, 400000 quadringenti-decingentillion, 500000 quingenti-decingentillion, 600000 sexgenti-decingentillion, 700000 septingenti-decingentillion, 800000 octingenti-decingentillion, 900000 nongenti-decingentillion

1000000 millillion

Table 2 Millillion to Millioneillion
(periods 10^{3i+3} , i = 1, 2, .. 1000000)

1-9 1 millillion, 2 billillion, 3 trilllillion, ..
10-90 10 decillillion, 20 vigintillillion, ..
100-900 100 centillillion, 200 ducentillillion, ...
1000-9000 1000 decingentillillion, 2000 bidecingentillillion,...
10000-90000 10000 deci-decingentillillion, ..
100000-900000 100000 centi-decingentillillion, ..
1000000 millioneillion

Table 3 Millioneillion to Millitwoillion
(periods $10^{3(10^{3i+3}+3)}$, i = 1, 2, .. 1000000)

1-9 1 millioneillion, 1 billioneillion, 3 trillioneillion, ..
10-90 10 decillioneillion, 20 vigintillioneillion, ..
100-900 100 centillioneillion, 200 ducentillioneillion, ..
1000-9000 decingentillioneillion, ..
10000-90000 deci-decingentillioneillion, ..

100000-900000 100000 centi-decingentillioneillion, ..
1000000 millitwoillion

The first three milli(cardinal)illion number names are defined below in terms of their periods:

Millioneillion: period $10^{3(10^{6}+3)}$

Millitwoillion: period $10^{3(10^{3(10^{6}+3)}+3)}$

Millithreeillion: period $10^{3(10^{3(10^{3(10^{6}+3)}+3)}+3)}$

The periods defining these numbers are expressed by ever-higher typewriter mountains -- in fact, the universe is not large enough to contain the typewriter mountain describing the period of one millimillillionillion!